

What is claimed is:

1. A portable computer comprising:
a desktop type processor;
a power management controller for judging the type
of the power of the portable computer; and
a clock generator, coupled to the power management
controller and the desktop type processor
respectively, for outputting a clock signal
based on a control signal from the power
management controller and a judge signal from
the desktop type processor so as to determine
an operational frequency and an operational
voltage of the desktop type processor.

2. The portable computer as claimed in claim 1,
wherein the clock generator includes a plurality of
transformation tables therein so that the clock generator
generates the clock signal from the control signal and
the judge signal by referencing the transformation
tables.

3. The portable computer as claimed in claim 2,
further comprising:

a DC power supply coupled to the power management
controller so that the power management
controller outputs a first control signal to
the clock generator, wherein the clock signal
of the clock generator is changed by the
transformation table corresponding to the first
control signal.

1 4. The portable computer as claimed in claim 3,
2 wherein the DC power supply is a battery.

1 5. The portable computer as claimed in claim 2,
2 further comprising:

3 an AC power supply coupled to the power management
4 controller so that the power management
5 controller outputs a second control signal to
6 the clock generator, wherein the clock signal
7 of the clock generator is changed by the
8 transformation table corresponding to the
9 second control signal.

1 6. The portable computer as claimed in claim 1,
2 further comprising:

3 a chipset coupled to the clock generator, wherein an
4 operational frequency and an operational
5 voltage of the chipset are changed based on the
6 operational frequency and voltage of the
7 desktop type processor.

1 7. The portable computer as claimed in claim 1,
2 further comprising:

3 a memory coupled to the clock generator, wherein an
4 operational frequency and an operational
5 voltage of the memory are changed based on the
6 operational frequency and voltage of the
7 desktop type processor.

1 8. The portable computer as claimed in claim 1,
2 further comprising:

3 a converter coupled to the clock generator and the
4 desktop type processor so as to convert the
5 voltage of the clock generator to the
6 operational voltage of the desktop type
7 processor.

1 9. The portable computer as claimed in claim 1,
2 wherein the desktop type processor includes a plurality
3 of calculation modes therein, and the operational
4 frequency and voltage of the desktop type processor are
5 linearly changed when the calculation modes change.

1 10. A power saving method for a portable computer
2 with a desktop type processor, comprising:
3 providing a plurality of transformation tables; and
4 determining an operational frequency and an
5 operational voltage of the desktop type
6 processor from the type and a calculation mode
7 of the desktop type processor by referencing
8 the transformation tables.

1 11. The method as claimed in claim 10, wherein the
2 operational frequency and voltage of the desktop type
3 processor are linearly changed when the calculation mode
4 of the desktop type processor changes.

1 12. The method as claimed in claim 10, wherein the
2 portable computer further includes a chipset, and the
3 method further comprises:

4 determining an operational frequency and an
5 operational voltage of the chipset from the

6 operational frequency and voltage of the
7 desktop type processor.

1 13. The method as claimed in claim 10, wherein the
2 portable computer further includes a memory, and the
3 method further comprises:

4 determining an operational frequency and an
5 operational voltage of the memory from the
6 operational frequency and voltage of the
7 desktop type processor.